

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application. Claims 1-7 and 9-11 are currently pending in this application. No new matter has been added by way of the present amendment. For instance, the amendment to claims 1 and 9, as well as new claims 10-11 are supported by the Specification at, for example, page 8, lines 11-20. Accordingly, no new matter has been added.

In view of the amendments and remarks herein, Applicants respectfully request that the Examiner withdraw all outstanding rejections and allow the currently pending claims.

Issues Under 35 U.S.C. § 103(a)

Claims 1-7 and 9 stand rejected under 35 U.S.C. §103(a) as obvious over Hosokawa (EP 0889063) (hereinafter Hosokawa '063) in view of Shimomura et al. (U.S. 4,959,060) (hereinafter Shimomura '060). Applicants respectfully traverse.

Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Moreover, there must be a reason why one of ordinary skill in the art would modify the reference or combine reference teachings to obtain the invention. A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR Int'l Co. v Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007). There must be a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed

new invention does. *Id.* The Supreme Court of the United States has recently held that the "teaching, suggestion, motivation test" is a valid test for obviousness, albeit one which cannot be too rigidly applied. *Id.* Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *Id.*

As previously discussed, the cited references, alone or in combination, fail to teach or suggest a process for preparing a water-absorbent resin as presently claimed. For instance, neither Hosakawa '063 nor Shimomura '060 teach or suggest adding a reducing agent to a polymer when the polymer is in a water-containing gelated state, as presently claimed. See, for example, Shimomura '060, which explicitly discloses that a compound (A) is added to an absorbent polymer **once dried** (emphasis added). Moreover, Applicants submit that the cited references fail to teach or suggest the addition of an oxidizing agent to a polymerized water-containing gelated product, as presently claimed (see, e.g., claim 9).

Clearly, the prior art of record, alone or in combination, fails to teach or suggest each and every limitation of the present invention. For this reason alone, this rejection is improper and should be withdrawn.

Additionally, Applicants submit that the unexpected and superior results obtained by the present invention rebut any *prima facie* case of obviousness allegedly established by the Examiner. In the Response filed on February 4, 2008, Applicants submitted a Declaration under 37 CFR 1.132 which unequivocally showed that the yellow index after production of the products of the prior art is extremely high, so that coloration resistance is unacceptable, whereas coloration resistance is superior in the method of the present invention. The Examiner, however,

appeared to believe that comparative tests should have been conducted not against something actually disclosed in the prior art, but against a modified version of the prior art (see Office Action of May 2, 2008).

After an Interview with the Examiner, Applicants submitted a third Declaration under 37 C.F.R. 1.132 on December 31, 2008, in accordance with the Examiner's recommendations during the Interview. The Examiner, however, has now taken the following position:

"It is noted that in the absence of showing criticality in the Declaration and in the specification of adding a reducing agent or an oxidizing agent to the polymerized water-containing gelled product in an amount of 0.001% to 6% by weight, based on 100 parts by weight of the α,β -unsaturated carboxylic acid, it is the examiner (sic) position to believe that the final product of Hosokawa and Shimomura's process for preparing the water-absorbent resin is the water absorbent composition which possesses an equivalent level of an effect of preventing coloration to that of the water-absorbent resin obtainable according to the claimed invention, because they contain substantially identical steps of the preparation and ingredients."

Applicants respectfully disagree and submit that Applicants have already shown that the closest prior art of record does not inherently possess the characteristic the Examiner believes is present therein (i.e., a yellow index of 12 or less, after allowing to stand at 50°C and 90% relative humidity for 20 days). Such a showing is sufficient under U.S. patent laws (see *In re Fenn*, 639 F.2d 762, 765, 208 USPQ 470 (CCPA 1981), *In re Merchant*, 575 F.2d 865, 869, 197 USPQ 785, 788 (CCPA 1978) and *In re DeBlauwe*, 222 USPQ 191 (Fed. Cir. 1984), which stand

for the proposition that it should be sufficient to compare with the closest prior art and show that the differences in properties are unexpected).

Moreover, Applicants note that, according to the Examiner, Applicants' arguments and evidence in the Declaration of December 31, 2008 are not commensurate in scope with presently pending independent claim 1. However, Applicants respectfully remind the Examiner that, according to case law precedent, it is not necessary to recite the advantages (improved properties) in the claims if the features which produce those advantages are recited in the claims (emphasis added) (see *In re Merchant*, 197 USPQ 785 (C.C.P.A. 1978)). Moreover, presently pending claim 6 explicitly recites the claimed yellow index.

In summary, Applicants have provided sufficient evidence to show that the water-absorbent resin obtained by the process of the prior art does not exhibit a yellow index of 12 or less, as claimed. Moreover, in order to expedite prosecution of the present application, Applicants submit herewith a fourth Declaration under 37 C.F.R. 1.132 for the Examiner's consideration, which unequivocally shows the criticality of the presently claimed range of the oxidizing and reducing agents.

The experiments discussed in the enclosed Declaration were conducted under the same conditions as in Example 1 of the present specification (Example C, D and E). As is evident from Table I in the enclosed Declaration:

- a) when the amount of sodium sulfite is 0.0005% by weight, the water-absorbent resin of Sample C has a Yellow Index exceeding 12 after standing for 20 days at 50°C and 90% relative humidity;
- b) when the amount of sodium sulfite is 0.005% by weight, the water-

absorbent resin of Sample D has a Yellow Index of 12 or less after standing for 20 days at 50°C and 90% relative humidity; and

c) when the amount of sodium sulfite is 2.0% by weight, the water-absorbent resin of Sample E has a Yellow Index of 12 or less after standing for 20 days at 50°C and 90% relative humidity.

Evidently, the water-absorbent resin shows a dramatic change in discoloration resistance when the amount of the reducing or oxidizing is in the range of 0.001 to 2 parts by weight, as presently claimed (see, e.g., claim 1).

Applicants respectfully submit that the prior art of record fails to render the present invention obvious. As such, reconsideration and withdrawal of this rejection are respectfully requested.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and objections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Vanessa Perez-Ramos, Reg. No. 61,158, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

Dated: NOV 20 2009

Respectfully submitted,

By 

Gerald M. Murphy, Jr.

Registration No.: 28,977

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant

Enclosure: Declaration under 37 C.F.R. 1.132 by Hideki YOKOYAMA